




**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 11 2016

MEMORANDUM

SUBJECT: ARARs Tables in Support of Proposed Plan for Operable Unit 08 - Railroads, Cherokee County Superfund Site

FROM: Elizabeth Hagenmaier, Remedial Project Manager
Special Emphasis Remedial Branch 

THRU: Preston Law, Acting Section Chief
Special Emphasis Remedial Section

TO: Site File

This memorandum transmits a document that includes tables for both federal and state applicable or relevant and appropriate requirements (ARARs) in support of the Proposed Plan for Operable Unit 08 – Railroads, Cherokee County Superfund site in Cherokee County, Kansas.

I can be reached at (913) 551-7939 if there are questions or a need for additional information.

Attachment

30286486



Superfund



Printed on Recycled Paper

ARARs

**This Page Intentionally
Left Blank**

Federal Chemical-Specific ARARs

| A. ARARs | Citations | Description |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clean Water Act (CWA) of 1977 | 33 U.S.C. § 1251 et seq. as amended in 1987 | Implements a system to impose effluent limitations on, or otherwise prevent, discharges of pollutants into any waters of the United States from any point source. Will be applicable if discharges to streams, rivers, or lakes occur from a site. |
| Safe Drinking Water Act | National Primary Drinking Water Standards 40 C.F.R. Part 141 Subpart B and G | Establish maximum contaminant levels (MCLs), which are health based standards for public waters systems. |
| Safe Drinking Water Act | National Secondary Drinking Water Standards 40 C.F.R. Part 143 | Establish secondary maximum contaminant levels (SMCLs) which are non-enforceable guidelines for public water systems to protect the aesthetic quality of the water. SMCLs may be relevant and appropriate if groundwater is used as a source of drinking water. |
| Safe Drinking Water Act | Maximum Contaminant Level Goals (MCLGs) 40 C.F.R. Part 141, Subpart F | Establishes non-enforceable drinking water quality goals. The goals are set to levels that produce no known or anticipated adverse health effects. The MCLGs include an adequate margin of safety. |
| B. To Be Considered | | |
| EPA Revised Interim Soil-lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities and 1998 Clarification | Office of Solid Waste and Emergency Response (OSWER) Directive 9355.4-12, July 14, 1994, OSWER Directive 9200.4-27P, August 1988 | Establishes screening levels for lead in soil for residential land use, describes development of site-specific preliminary remediation goals, and describes a plan for soil-lead cleanup at CERCLA sites. This guidance recommends using the EPA Integrated Exposure Uptake Biokinetic Model (IEUBK) on a site-specific basis to assist in developing cleanup goals. |
| EPA Strategy for Reducing Lead Exposures | EPA, February 21, 1991 | Presents a strategy to reduce lead exposure, particularly to young children. The strategy was developed to reduce lead exposure to the greatest extent possible. Goals of the strategy are to 1) significantly reduce the incidence above 10 µg Pb/dL in children; and 2) reduce the amount of lead introduced into the environment. |

| | | |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technical Impracticability Waiver in Groundwater ARARs, Cherokee County Superfund site | EPA, Region 7 Record of Decision for OU 03 and OU 04 of the Cherokee County site, August 1997. | This document established the technical impracticability (TI) of restoring the shallow groundwater aquifer in mined areas of the Cherokee County site. The TI waiver determined that aquifer restoration was impracticable based on the large size and heterogeneous nature of the aquifer, lack of effective pumping and treatment technology, and the inordinate costs associated with groundwater treatment. |
| Superfund Lead- Contaminated Residential Sites Handbook | EPA OSWER 9285.7-50, August 2003. | Handbook developed by EPA to promote a nationally consistent decision making process for assessing and managing risks associated with lead contaminated residential sites across the country. |

State Chemical-Specific ARARs

| A. ARARs | Citation | Description |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kansas Surface Water Quality Standards | K.A.R. 28-16-28b through 28-16-28g | Establishes water quality criteria in surface waters of the state to maintain and protect the existing uses of those surface waters. Will be relevant and appropriate at sites where surface waters of the state are affected. |
| Kansas Primary Drinking Water Regulations | K.A.R. 28-15a-11 | Establishes maximum contaminant levels (MCLs) for inorganic chemicals that are health risk based standards for drinking water. Will be applicable at the distribution point (i.e., at the tap). Will be relevant and appropriate at sites where potential drinking water sources—rivers, lakes, reservoirs, springs, and ground water wells—are affected. |
| B. To Be Considered | | |
| Screening Goals for Contaminants in Soil and Groundwater | Kansas Department of Health and Environment (KDHE), Bureau of Environmental Remediation (BER), Risk Based Standards for Kansas, RSK Manual - 5th Version, October 2010, Revised September 2015, as amended | Identifies risk-based cleanup screening goals for contaminants in soil and groundwater. |

Federal Location-Specific ARARs

| A. ARARs | Citation | Description |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site within an area where action may cause irreparable harm, loss, or destruction of artifacts. | Archeological and Historic Preservation Act; 16 U.S.C. 469, 40 C.F.R. 6.301. | Provides for the preservation of historical or archaeological data which might be destroyed or lost as the result of 1) flooding, building of access roads, relocation of railroads and highways, and other alterations of terrain caused by the construction of a dam by government or persons, or 2) alteration of terrain caused by Federal construction projects or federally licensed activity or program. Will be applicable if construction projects or alteration of terrain at a site have the potential to destroy historical or archaeological materials. |
| Historic project owned or controlled by a federal agency | National Historic Preservation Act: 16 U.S.C. 470, et seq; 40 C.F.R. § 6.301; 36 C.F.R. Part 1. | Establishes a national registry of historic sites. Provides for preservation of historic or prehistoric resources. Will be applicable if a site is listed on historic registry and if activities requiring permitting are initiated at a site. |
| Site located in area of critical habitat upon which endangered or threatened species depend. | Endangered Species Act of 1973, 16 U.S.C. 1531-1543; 50 C.F.R. Parts 17; 40 C.F.R. 6.302. Federal Migratory Bird Act; 16 U.S.C. 703-712. | Provides a program for conservation of threatened and endangered plants and animals and the habitats in which they are found. Will be applicable if threatened or endangered species, or their habitats are present at or near a site. |
| Clean Water Act (CWA) of 1977 Wetlands Protection | 40 CFR 22, 40 CFR 230 to 233, and 33 CFR 320 to 330 | Allows for permitting of discharge of dredged or fill material to the waters of the United States if no practicable alternatives exists that are less damaging to the aquatic environment. Applicants must demonstrate that the impact to wetlands is minimized. Will be applicable if designated wetlands are affected by a remedy. |
| Site located within a floodplain soil. | Protection of Floodplains, Executive Order 11988; 40 C.F.R. Part 6.302, Appendix A. | Requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Will be applicable if a site is located on a designated flood plain. |

| A. ARARs | Citation | Description |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wetlands located in and around the soil repository. | Protection of Wetlands; Executive Order 11990; 40 C.F.R. Part 6, Appendix A. | Requires federal agencies to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Will be applicable if designated wetlands are affected by a remedy. |
| Fish and Wildlife Conservation Act | Fish and Wildlife Conservation Act of 1980, 16 U.S.C. Part 2901 et seq.; 50 C.F.R. Part 83.9 and 16 U.S.C. Part 661, et seq. Federal Migratory Bird Act, 16 U.S.C. Part 703. | Action to conserve fish and wildlife, particularly those species that are indigenous to the state. Will be applicable if significant populations are present at a site or they are affected by site activities. |
| Fish and Wildlife Coordination Act | 16 U.S.C Section 661 et seq.; 33 C.F.R Parts 320-330; 40 C.F.R 6.302 | Requires consultation when a Federal department or agency proposes or authorizes any modification of any stream or other water body, and adequate provision for protection of fish and wildlife resources. |
| Historic Site, Buildings, and Antiquities Act | 16 USC Section 470 et seq., 40 CFR Sect. 6.301(a), and 36 CFR, Part1. | Requires Federal agencies to consider the existence and location of landmarks on the National Registry of Natural Landmarks and to avoid undesirable impacts on such landmarks. |
| Clean Air Act | National Ambient Air Quality Standards/ NESHAPS 42 U.S.C. 74112; 40 C.F.R. 50.6 and 50.12 | Emissions standards for particular matter and lead. |
| Rivers and Harbors Appropriation Act of 1899 | 33 U.S.C. 401; 33 U.S.C. 403; and related regulations 33 C.F.R. 320 | Prohibits building of structures (Section 9) and the disposal of dredged and fill material into waters of the U.S. without a permit by a designated federal agency. Will be applicable if structures are constructed or a discharge of dredged or fill material occurs in waters of the U.S. |

| A. ARARs | Citation | Description |
|---------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 100-year floodplain | Location Standard for Hazardous Waste Facilities- RCRA; 42 U.S.C. 6901; 40 C.F.R. 264.18(b). | RCRA hazardous waste treatment and disposal. Facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout during any 100-year/24 hour flood. |
| B. To Be Considered | None | |

State Location-Specific ARARs

| A. ARARs | Citation | Description |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water Structures and Stream Obstructions and The Levee Law | K.S.A. 82a-301 through 82a-328; K.A.R. 5-40 through 5-46; K.S.A. 24-105 and K.S.A. 24-126; K.A.R. 5-45-1 through 5-45-23 | <p>Requires the Division of Water Resources to permit certain actions including dam construction or modification, stream obstruction construction, stream channel modification, levee construction, and floodplain fill.</p> <p>Will be applicable for any action requiring dam construction or modification, stream obstruction, channel modification, levee construction, or floodplain fill.</p> |
| Kansas Historic Preservation Act | K.A.R. 118-3-1 to 118-3-16 | <p>Provides for the protection and preservation of sites and buildings listed on state or federal historic registries.</p> <p>Will be applicable if a site or building is listed on the state or federal historic registry and if activities requiring permitting are initiated at a site.</p> |
| Nongame and Endangered Species Conservation Act of 1975 | K.S.A. 32-957 through 32-963, 32-1009 through 32-1012, 32-1033 and K.S.A. 32-960a and 32-960b, and amendments thereto | <p>Places the responsibility for identifying and undertaking appropriate conservation measures for listed species directly upon the Department of Wildlife, Parks and Tourism. Regulations require the department to issue special action permits for activities that affect species listed as threatened and endangered in Kansas.</p> <p>Will be applicable if state-listed threatened or endangered species, or their habitats are present at or near a site.</p> |
| B. To Be Considered | None | |

Federal Action-Specific ARARs

| A. ARARs | Citation | Description |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| National Pollutant Discharge Elimination System (NPDES) | 40 C.F.R. Part 122.26; 33 U.S.C 402 (p) | Regulates discharges of pollutants from any point source into waters of the United States. Will be applicable if water from the site will be discharged onto land or into streams, rivers or lakes. |
| Storm Water Discharge Requirements NPDES | 40 CFR 122.26 | Provide requirements to obtain a permit to discharge to the storm water sewer system under the NPDES program. Will be applicable if the site has storm water that comes in contact with construction or industrial activity or if the selected remedy involves discharge of treated water to surface waters. |
| Federal Water Quality Standards | 40 CFR 131 | Establishes non-enforceable standards to protect aquatic life. |
| National Ambient Air Quality Standards (NAAQS) | 42 U.S.C. 74112; 40 C.F.R. 50.6 and 50.12 | Emissions standards for particular matter and lead. |
| Resource Conservation and Recovery Act (RCRA), Subtitle D, Solid Waste Regulations | 42 USC Sec. 6941 40 CFR Part 257, Criteria for Classification of Solid Waste Disposal Facilities and Practices | This section of the RCRA regulations requires the closure of existing solid waste facilities, design of new landfills, and disposal of solid wastes to be in accordance with various standards and criteria. These standards are applicable to solid waste disposal facilities, including mining and mill waste facilities. Among other things, these regulations require that facilities be maintained to prevent wash out of solid wastes and that the public not be allowed uncontrolled access. |
| Surface Mining Control and Reclamation Act (SMCRA) | 30 USC Sees. 1201-1328 30 CFR Part 816 | SMCRA regulations govern coal exploration and active coal mining. Hence, these regulations are not applicable to remedial actions taken at the Cherokee County Site. Nevertheless, some of the surface mining standards found in 30 CFR Part 816 are relevant and appropriate requirements because they address circumstances that are similar to those found at the Cherokee County Site. The relevant and appropriate requirements include Part 816.45, Sediment Control Measures; Part 816.46, Siltation Structures; Part 816.102, Grading Requirements; and Part 816.111, Revegetation. |

| | | |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DOT Hazardous Materials Transportation Regulations | 49 CFR Parts 107, 171-177 | Regulates transportation of hazardous materials. Would be relevant and appropriate for the transport of excavated materials within the Site. |
| B. To Be Considered | | |
| RCRA, Subtitle C, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities | <p>RCRA Section 3001 et seq. 42 USC Sec. 6921, et seq.</p> <p>40 CFR Part 264.522, Disposal Of Hazardous Wastes In Designated Corrective Action Management Units (CAMUs).</p> <p>40 CFS Part 264.554(D)(1)(i) and (ii) Staging Piles</p> | The section defines Corrective Action Management Units (CAMUs) to be used in implementing corrective actions at Superfund Sites. A CAMU is defined as a disposal site used for consolidation or placement of remediation wastes within the contaminated areas of the site. Under these regulations, placement of wastes in a CAMU does not constitute land disposal of hazardous waste and does not constitute creation of a unit subject to the RCRA land disposal restrictions and minimum technology requirements (40 CFR Part 268).. This Section of RCRA is not an ARAR because of the Beville exclusion, but certain substantive requirements related to design, operation and closure of disposal sites should be considered. |
| RCRA, Subtitle C, Identification and Listing of Hazardous Wastes | <p>RCRA Section 3001(b)(3)(A)(iii), Beville exclusion of mineral extraction and beneficiation wastes. 40 CFR Part 264.2, Definition of solid waste and 40 CFR Part 261.4 (b) (7)</p> | Mill waste within the Site is specifically excluded from regulation as hazardous wastes under the Beville exclusion because they are wastes resulting from mineral extraction and beneficiation. Therefore, the RCRA Subtitle C regulations are not ARARs. |
| Toxic Substances Control Act – Strategy for Reducing Lead Exposures | EPA, February 21, 1991 | Presents strategies for reducing lead exposures by reducing the amount of lead in the environment, as well as reducing blood lead levels, especially in children. |
| EPA Mine Waste | EPA Region 7 Fact Sheet, February 2003 | Provides public guidance on mine waste usage in the states of Missouri and Kansas. Provides a list of uses for mine waste that is not likely to present a threat to human health and the environment. |

State Action-Specific ARARs

| A. ARARs | Citation | Description |
|------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mined Land Reclamation | K.A.R. 47-16-1 to 47-16-11 | Allows for the reclamation of mined land and associated waters. Will be applicable if mined land or associated waters are to be reclaimed. |
| Environmental Use Controls | K.S.A. 65-1,221 to 65-1,235 | <p>An environmental use control "means an institutional control or administrative control, a restriction, prohibition or control of one or more uses of, or activities on, a specific property, as requested by the property owner at the time of issuance, to ensure future protection of public health and the environment when environmental contamination which exceeds department standards for unrestricted use remains on the property following the appropriate assessment and/or remedial activities as directed by the department pursuant to the secretary's authority".</p> <p>These restrictions are strictly voluntary as the landowner applies for the restriction to their property to mitigate the risk posed to human health and the environment from contamination at their property (in lieu of active remediation).</p> |
| Hazardous Waste Management Standards and Regulations | K.S.A. 65-3430 et seq., as amended; K.A.R. 28-31-4 et seq., as amended | <p>Identifies the characteristics and listing of hazardous waste. Prohibits underground burial of hazardous waste except as granted by EPA or KDHE. Establishes restrictions on land disposal. Establishes standards for generators or transporters of hazardous waste. Establishes standards for hazardous waste storage, treatment and disposal facilities.</p> <p>Will be applicable if hazardous wastes are present at a site.</p> |
| Kansas Board of Technical Professions | K.A.R. 66-6-1 through 66-14-12 | <p>Establishes the requirements for licensing of engineers, land surveyors, geologists, and architects.</p> <p>Will be applicable if the services of a geologist, engineer or land surveyor are required for site investigations or remediation.</p> |

| | | |
|----------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Spill Reporting | K.A.R. 28-48-1 to 28-48-2 | <p>Requires reporting of unpermitted discharges or accidental spills. Requires that containment and immediate environmental response measures be implemented. Also provides for technical assistance for mercury-related spills.</p> <p>Will be applicable if unpermitted discharges or accidental spills occur at a site.</p> |
| B. To Be Considered | | |